

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in this application.

LISTING OF CLAIMS

1. (Currently Amended) A brake pressure control device in a brake system of the type that brake fluid whose pressure depends on the operation force exerted on a brake pedal is supplied from a master cylinder to a wheel cylinder serving as brake force generator thereby to apply a brake force to a road wheel, said brake pressure control device comprising:

an electromagnetic pressure control valve having inlet and outlet ports respectively connected to said master cylinder and said wheel cylinder ~~for controlling the fluid pressure at said outlet port to become higher from zero to a control differential pressure than the pressure at said inlet port in dependence on a control current applied thereto and adapted to vary an opening degree thereof in dependence on a control electric current applied to the electromagnetic pressure control valve so that a pressure difference between said inlet and outlet ports is adjustable to a controlled pressure;~~

a fluid pump connected at ejection and suction ports thereof respectively to said outlet and inlet ports of said electromagnetic pressure control valve; and

~~control means for varying a value of said control electric current applied to said electromagnetic pressure control valve for a brake assist control and for a slope starting control and for operating said fluid pump when either of said brake assist control and said slope starting control is required, and for setting to set said control~~

~~differential controlled pressure generated by said electromagnetic pressure control valve to an assist increase pressure at the execution of a said brake assist control and to a stop holding pressure at the execution of a said slope starting control[.].~~
wherein said stop holding pressure is different from said assist increase pressure.

2. (Original) The brake pressure control device as set forth in Claim 1, further comprising:

a fluid pressure control device having an inlet port, an outlet port and a drain port respectively connected to said outlet port of said electromagnetic pressure control valve, said wheel cylinder and a reservoir for making said outlet port of said electromagnetic pressure control valve and said wheel cylinder connect with each other, disconnect from each other or connect with said reservoir;

a first conduit connecting said ejection port of said fluid pump to said outlet port of said electromagnetic pressure control valve and said inlet port of said fluid pressure control device through a first check valve for preventing fluid from flowing toward said ejection port; and

a second conduit connecting said suction port of said fluid pump to said drain port of said fluid pressure control device and said reservoir through a second check valve for permitting fluid to flow to said suction port.

3. (Canceled)

4. (Currently Amended) The brake pressure control device as set forth in Claim 1, wherein said ~~control differential controlled~~ pressure generated by said electromagnetic pressure control valve is altered from said assist increase pressure to said stop holding pressure when said slope starting control is to be executed in mid course of said brake assist control.

5. (Currently Amended) The brake pressure control device ~~combination~~ as set forth in Claim 1, wherein said control differential pressure generated by said electromagnetic pressure control valve remains set to said stop holding pressure when said brake assist control is to be executed in mid course of said slope starting control.

6. (New) A brake pressure control device in a brake system of the type that brake fluid whose pressure depends on the operation force exerted on a brake pedal is supplied from a master cylinder to a wheel cylinder serving as brake force generator thereby to apply a brake force to a road wheel, said brake pressure control device comprising:

an electromagnetic pressure control valve having inlet and outlet ports respectively connected to said master cylinder and said wheel cylinder and adapted to vary an opening degree thereof in dependence on a control electric current supplied to said electromagnetic pressure control valve so that a pressure difference between said inlet and outlet ports is adjustable to a controlled pressure;

a fluid pump connected at ejection and suction ports thereof respectively to said outlet and inlet ports of said electromagnetic pressure control valve;

solenoid-operated shutoff valve means connected downstream of said electromagnetic pressure control valve and between said electromagnetic pressure control valve and said wheel cylinder for controlling pressure increase, pressure holding and pressure decrease for said wheel cylinder; and

controls means for varying a value of said control electric current applied to said electromagnetic pressure control valve for a brake assist control and for a slope starting control, and for operating said fluid pump when either of said brake assist control and said slope starting control is required, to set said controlled pressure to an assist increase pressure at execution of said brake assist control and to said stop holding pressure at execution of said slope starting control, wherein said stop holding pressure is different from said assist increase pressure, said control means being also operable when an anti-lock brake control is required, for controlling opening and closing of said solenoid-operated shutoff valve means to repetitively perform an increase, retention and decrease in the brake force applied to said road wheel.